

PATENT

Docket No.: W5020.0128/P128

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of:

Michael A. Waters

Serial No.: 08/997,879

Group Art Unit: 3732

Filed: December 24, 1997

Examiner: T.E. Manahan

U.S. Patent No. 5,477,812

For: AUTOMATED SELF-CLEANING

LITTER BOX FOR CATS

Assistant Commissioner for Patents

Washington, D.C. 20231

SUBMISSION OF LETTERS PATENT

Dear Sir:

Responsive to the Office Action dated February 5, 1999, and pursuant to the provisions of 37 C.F.R. § 1.178, Applicant herewith submits the above-referenced original Letters Patent. Entry of the April 5, 1999 Amendment is requested. During a telephone interview on August 5, 1999, the Examiner confirmed that the submission of this Letters Patent, along with the April 5, 1999 Amendment, would overcome all outstanding objections and rejections. The Examiner confirmed that it would not be necessary to file a Notice of Appeal to obtain entry of the April 5, 1999 Amendment.

a summarial

A petition for an extension of time is being filed concurrently herewith. Please charge any fees due in connection with this paper to Deposit Account 04-1073.

Allowance of the reissue application is requested.

Dated: August 5, 1999

Respectfully submitted,

Mark J. Thronson

Registration No.: 33,082

DICKSTEIN SHAPIRO MORIN

SOURCE SOURCE SOURCE STATE OF THE SOURCE SOU

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

To solve to

Attorneys for Applicant

11:

分别 克里森特拉克

Linguista of the

The contraction of

•

.

2

The United States of America



The Commissioner of Patents and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Buce Tehran

Commissioner of Patents and Trademarks

Dare Luy

The United States of America



The Commissioner of Patents and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Since Tehran

Commissioner of Patents and Trademarks

Dare My



JS005477812A

United States Patent [19]

Waters

[11] Patent Number:

5,477,812

[45] Date of Patent:

Dec. 26, 1995

[54] AUTOMATED SELF-CLEANING LITTER BOX FOR CATS

[75] Inventor: Michael A. Waters, Barrington Hills,

Ill.

[73] Assignee: Waters Research Company, Elgin, Ill.

[21] Appl. No.: 371,782

[22] Filed: Jan. 12, 1995

[56] References Cited

U.S. PATENT DOCUMENTS

3,734,057	5/1973	Lee et al	119/163
3,811,410	5/1974	Roberts	119/163
4,096,827	6/1978	Cotter .	
4,117,804	10/1978	Moore et al	
4,190,525	2/1980	Menzel .	
4,325,325	4/1982	Larter .	
4,325,822	4/1982	Miller .	
4,658,720	4/1987	Massonnet	220/908
4,729,342	3/1988	Loctin	119/163
4,934,317	6/1990	Pourshalchi	119/165
4,949,672	8/1990	Yamamoto	119/169
5,048,465	9/1991	Carlisi .	
5,107,797	4/1992	La Roche	119/163
5,184,575	2/1993	Reinartz	119/163
5,226,388	7/1993	McDaniel .	
5,249,549	10/1993	Rockaitis, III .	

FOREIGN PATENT DOCUMENTS

154540 9/1985 European Pat. Off. 119/166

Primary Examiner—Todd E. Manahan

Attorney, Agent, or Firm-Dorn, McEachran, Jambor &

[57] ABSTRACT

An improved automated self-cleaning litter box for cats, of the kind having a housing defining an upwardly open chamber for storage of a supply of cat litter, accessible to a cat and having path members on opposed side walls defining a comb path from one end of the chamber to the other. A comb, normally stored at the comb storage end of the chamber, is driven forward along the path to the discharge end of the chamber and back to its original storage position. As the comb traverses the chamber forwardly it engages any clumps of waste in the litter and carries them to a disposal receptacle at the discharge end of the chamber. The improvement includes a sensor for sensing the presence of a cat in the litter chamber; a photo electric sensor is preferred, but an infra red, weight, or even an audible sensor can be used. A delay device actuates the comb drive a predetermined time interval after the sensor ceases to sense the presence of a cat in the litter chamber. In the improved construction the comb path includes multi-perforate track members on opposite sides of the litter chamber; those tracks are engaged by rotatable drive wheels connected to the comb. The comb drive includes a reversible electric motor, mounted on the same carriage as the comb. A transparent, biodegradable receptacle is used; alarms for a full receptacle and for an insufficient litter supply are provided.

22 Claims, 7 Drawing Sheets

